



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,832	08/20/2003	Eduardo Figueiredo	GEMS8081.159	1831

27061 7590 10/04/2006

ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS)  
14135 NORTH CEDARBURG ROAD  
MEQUON, WI 53097

EXAMINER
----------

SOLANKI, PARIKHA

ART UNIT	PAPER NUMBER
----------	--------------

3737

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/604,832	FIGUEIREDO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Parikha Solanki	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 26 is/are rejected.
- 7) ☒ Claim(s) 3 and 21-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/20/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/25/03, 8/17/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 3 is objected to because of the following informalities: there is a typographical error in line 4. The word "then" in line 4 should be replaced by "than". Appropriate correction is required.
2. Claims 21 – 25 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 21-25 recite "the method of manufacturing of claim 20," however, claim 20 is a method of use claim. It is recommended that claims 21-25 be canceled from the application.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:  
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim refers to the construction of the collapsible housing, which is not described anywhere in the disclosure. For the purposes of examination, Examiner will assume that the claim is meant to read "...wherein the collapsible housing is inflated by a non-gaseous substance" and will rely on this assumption for the remainder of this office action.
5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3737

6. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "than would be otherwise" in claim 3 is a relative term which renders the claim indefinite. The explicit meaning of "otherwise" is not sufficiently defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

7. Claims 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 21-25 improperly depend from claim 20; they recite claim 20 as being a method of manufacturing, whereas claim 20 is directed toward a method of using the device. It is recommended that claims 21-25 be canceled from the application.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-20 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Eilenberg (US Patent Number 5,414,358).

Regarding claims 1, 20 Eilenberg ('358) discloses a probe for endo-cavity MR imaging where the MR coil is enclosed in a bag into which fat saturation enhancing material is introduced, wherein the fat saturation enhancing material also enhances homogeneity (col. 12 lines 29-34, Figs. 14 & 15).

Regarding claims 2 and 4-6, Eilenberg ('358) further discloses that the fat saturation enhancing material may be a perfluorocarbon, which is well known in the art to promote magnetic field homogeneity in MR spectroscopy applications (col. 7 lines 22-25). Eilenberg ('358) specifies that fluorocarbon compounds have a magnetic susceptibility similar to that of water-containing human tissue, and also discloses that such compounds are in a gel or liquid state at room temperature (col. 7 line 25-27 & 46-68).

Art Unit: 3737

Regarding claim 3, Eilenberg ('358) discloses that the bag is selectively fillable so as to facilitate maximum contact between the bag containing the homogeneity-enhancing material and the body cavity being imaged, which allows for receiving MR data from a wider area of the subject as described in the specification of the instant application (col. 11 lines 6-8).

Regarding claims 7 -9, Eilenberg ('358) states that the probe may be in a deflated state prior to insertion into the rectum, and that the probe can be inflated via a syringe following insertion (col. 12 lines 39-43).

Regarding claim 10, Eilenberg ('358) states that the bag constituting the flexible coil housing is filled to allow the entire unit to conform to the body shape, which would inherently secure the RF coil within the body cavity being imaged (col. 12 lines 2-5).

Regarding claims 11-19, Eilenberg ('358) anticipates all features of the MR probe as described above. Eilenberg ('358) further describes the probe in the context of common MRI machines (col. 9 line 22). It is well known in the art that MRI machines comprise a plurality of gradient coils positioned about a bore of a magnet, an RF transceiver system, and an RF switch controlled by a pulse module. Eilenberg ('358) thereby anticipates that the homogeneity-enhancing probe ('358) may comprise an apparatus including such a probe, in addition to including a gradient coil, RF transceiver system, and an RF switch.

Regarding claim 26, Eilenberg ('358) discloses the probe as being an assembly of separate components, including the coil, housing and supply of perfluorocarbon, all of which collectively constitute a kit (Fig. 1).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha Solanki whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

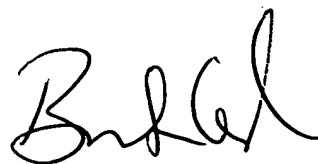
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Parikha Solanki  
Examiner  
Art Unit 3737



BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700